

REMARKS

Claims 1 and 3-40 are all the claims presently pending in the application. Claims 1, 13, 20, 25, and 33 are amended to more clearly define the invention. Claim 40 has been added. Claim 2 remains canceled. Claims 1, 13, 20, 25, and 33 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicants also note that, notwithstanding any claim amendments herein or later during prosecution, Applicants' intent is to encompass equivalents of all claim elements.

Claims 13-20 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Claims 1 and 3-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Burke, et al. (U.S. Patent No. 6,789,252) in view of Sheard, et al. (U.S. Patent No. 6,208,345), and further in view of Kompella. (U.S. Patent No. 7,350,191 B1).

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 1, is directed to a method of discovering a business object definition that includes receiving an object and a collaboration code, and determining a business object definition for the object based upon the collaboration code. The collaboration code determines the business object definition for the object without pre-defined business object definitions, if the object does not conform to a known business object definition.

Conventional systems and methods may include object discovery agents that produce

business object definitions that including mapping information between object attributes and data fields in the application data sources. However, these methods and systems must subscribe in advance to the pre-defined business object definitions, and can only exchange business objects of the business object definitions. Changes in business object definitions often render these conventional systems and methods useless. Further, these systems and methods often need to subscribe to a very large number of business object definitions. (See Application from page 2, lines 15-25 to page 3, lines 1-20).

In stark contrast, the present invention may be capable of determining a business object definition for an object based upon a collaboration code without need to include pre-defined business object definitions. (See Application at page 6, lines 15-22). In this manner, the present invention may be capable of reverse engineering the composition of a business object thereby obviating the above-described problems.

II. THE 35 U.S.C. § 101 REJECTION

The Examiner maintains that claims 13-20 are directed to non-statutory subject matter.

In particular, the Examiner continues to allege that claims 13-20 are directed to "software per se," and requires that the Applicants amend the claims to recite hardware

However, the Applicants maintains that claims 13-20 are system claims and are clearly not directed to either software modules, or "software per se" as alleged by the Examiner.

disclosure that describes those elements. Instead, Applicants submit that systems claims are not required to be directed to any hardware and it is improper for the Examiner to attempt to require the Applicants to amend these claims to recite hardware in the body.

Also, MPEP 2106 (II)(C) states that, where means plus function language is used to define the characteristics of a machine or manufacture invention, such language must be interpreted to read on only the structures or materials disclosed in the specification and “equivalents thereof” that correspond to the recited function. Two *en banc* decisions of the Federal Circuit have made clear that the USPTO is to interpret means plus function language according to 35 U.S.C. § 112, sixth paragraph. *In re Donaldson*, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994) (*en banc*); *In re Alappat*, 33 F.3d 1526, 1540, 31 USPQ2d 1545, 1554 (Fed. Cir. 1994) (*en banc*).

Disclosure may be express, implicit, or inherent. Thus, at the outset, USPTO personnel must attempt to correlate claimed means to elements set forth in the written description that perform the recited step or function. The written description includes the original specification and the drawings and USPTO personnel are to give the claimed means plus function limitations their broadest reasonable interpretation consistent with all corresponding structures or materials described in the specification and their equivalents including the manner in which the claimed functions are performed. See *Kemco Sales, Inc. v. Control Papers Company, Inc.*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000). Further guidance in interpreting the scope of equivalents is provided in MPEP § 2181 through § 2186.

Here, the systems claims recites means-plus-function language. In view of the cited MPEP section above, Applicants submit that the Examiner is required to consult the specification to identify the all structures that define the “means”.

Further, Applicants submit that the results of the claimed system as recited by at least claims 13 and 20 are useful, tangible, and concrete because the results of the claimed system are useful for determining an object definition based on the received object and collaboration

code, the object definition has tangible application of meeting a system design target, and the invention is concrete, because the invention provides a repeatable solution, within the constraints of the principles of uncertainty upon which the present invention is based.

Also, the Examiner continues to fail to provide any case law holding to support his allegations, or case law requiring that a systems claim be structurally and functionally interrelated to a hardware. This “software *per se*” test seems to have originated somewhere within the USPTO and seems to have taken on a life of its own. None of the Examiners using this rejection, including the instant rejection, has provided a case law citation, so that the terminology “software *per se*” can be reasonably defined.

Applicants can only speculate on what “software *per se*” is intended to mean, as used by this and other Examiners. Perhaps this terminology is intended to meaning the description of a software program as defined in terms of functional language.

Therefore, presuming, *arguendo*, something along this description as being the intended definition for “software *per se*”, Applicants bring to the Examiner’s attention the holding of *AT&T Corp., v. Excel Communications, Inc.* 172 F.3d 1352; 1999 U.S. App. LEXIS 7221; 50 U.S.P.Q.2D (BNA) 1447. This holding upheld the statutory subject matter of US Patent 5,333,184 to Doherty et al. Therefore, as only one example of the claims that were upheld in *AT&T*, and presumed to be “software *per se*”, is claim 1, as follows:

A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:

generating a message record for an interexchange call between an originating subscriber and a terminating subscriber; and
including, in said message record, a primary interchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers.

Therefore, presuming that “software *per se*” means describing software using functional steps, Applicants bring the *AT&T* holding to the attention of the Examiner and point out that, if the USPTO intends to continue rejecting software-related inventions based on wording of claims, then it is incumbent on the USPTO to develop some clear guidelines on what choice of wording is acceptable so that all examiners are using the same standard of review, instead of having undefined tests such as “software *per se*”, which is not defined in the rejection, in the Guidelines, in the MPEP, or in any case law.

Reconsideration and withdrawal of the rejection is respectfully requested.

III. THE PRIOR ART REJECTION

The Examiner alleges that the Burke, when combined with Sheard and Kompella, renders obvious claims 1 and 3-38. Applicants submit, however, that there are elements of the claimed invention which are neither taught nor suggested by Burke or Sheard.

Claim 1 recites, inter-alia:

“wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition.”

Claims 13, 20, 25, and 33 recite similar claim features.

As conceded by the Examiner, neither Burke nor Shear teach or suggest, “wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition.” (Office Action, page 4, lines 5-8). Kompella also fails to remedy Burke’s and Sheard’s deficiencies,

Applicant points out that “[w]hen a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied upon must be

designated as nearly as practicable” (see M.P.E.P. § 707; 37 C.F.R. § 1.104). Indeed, “the particular figure(s) of the drawing(s), and/or page(s) or paragraph(s) of the reference(s), and/or any relevant comments briefly stated should be included” (see M.P.E.P. § 707).

The Examiner, however, has merely block-copied Applicant’s claim language without explaining which features of the applied reference may teach or suggest the features of the claims.

First, That is, Kompella does not teach or suggest the above claimed features, “wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition,” because Kompella is not concerned about discovering a business object definition. Instead, Kompella only teaches a method and architecture that discovers software-application metadata and generates data access applications based on the discovered metadata. (Abstract).

Also, the Examiner has not identified which features of Kompella teaches or suggests, “collaboration code,” “predefined business object definitions,” “object,” or “wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions,” on the condition, “if the object does not conform to a known business object definition.”

Indeed, Kompella merely teaches that in an upgrade protection process (268),..., renames the data objects in a new run to match their names in a previous run when it can be determined they are the same data objects by their relationships to the source application screens from which they originated, and the meta data descriptions of the records returned by the data objects. However, Kompella fails to teach or suggest what happens, “if the object does not conform to a known business object definition.”

The Examiner appears to have confused Kompella's meta data as being the business object definition of the claimed invention. While Kompella teaches that an upgrade protection process may determine the best compatible but differently named metadata definition of the data objects, merely determining a metadata definition is not the same as, and does not teach or suggest, "wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions."

Therefore, no initial burden has been met to establish that the claimed invention is obvious in view of the prior art references.

Assuming, arguendo, that Kompella does remedy the deficiencies of Burke and Sheard, In re Kahn states that, "Rejection based on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F. 3d 977, 988. Also, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham*. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.

Exemplary rationales that may support a conclusion of obviousness include:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D)Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E)“Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F)Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;

(G)Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. (See MPEP 2143).

Here, the Examiner has not clearly articulated one of ordinary skill in the art would even consider combining Kompella with Sheard or Burke. Indeed, the Examiner merely made a conclusory statement that Kompella teaches that previous methods were “too costly and too time consuming” without pointing out that Kompella was indeed referring to the methods and systems of Sheard or Burke as being “the conventional system” that makes it “a very time consuming, manual process to learn the data structures, hone the required skills and write the queries, reports, or routines to extract the data and make it meaningful to a business user. (Kompella column 1, lines 30-45).

Since there are features of the claims that are neither taught nor suggested by the above-cited references, reconsideration and withdrawal of the rejections is respectfully requested.

IV. NEW CLAIM

New claim 40 is added to claim additional features of the invention and to provide more varied protection for the claimed invention. Support for claim 40’s recited claim features can be found on at least page 13, line 14-page 14, line 8 of the specification. The claim is independently patentable because of the novel and non-obvious features recited therein.

Claim 40 is patentable over any combination of the cited references at least based on

similar reasons to those set forth above with respect to claim 1.

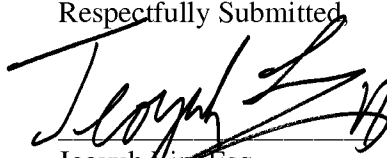
V. FORMAL MATTERS AND CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 3-40, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Date: August 29, 2008

Respectfully Submitted,

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